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EXAMINER	
MEUCCI, MICHAEL D	
ART UNIT	PAPER NUMBER
2142	

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/051,991	CARLSON ET AL.	
	Examiner	Art Unit	
	Michael D. Meucci	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-48* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-48* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 June 2005* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the request for reconsideration filed 11 September 2006.

2. Claims 1-48 remain pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 2, 4, 7, 16, 18, 20, 25, 27, 32, 33, 35, 38, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller (U.S. 2003/0055972) in view of Zavalkovsky (U.S. 6,822,940 B1).

a. With respect to claim 1, Fuller discloses a method for managing multiple resources in a system including at least one host (par. 30, lines 1-4), network (par. 28, lines 4-12), and a storage space comprised of at least one storage system that each host is capable of accessing over the network (par. 27, line 5), comprising:

after an initial resource configuration has been established and continually during the operation of the system, measuring and monitoring a plurality of service level parameter values indicating a state of the resources in the system (par. 36, lines 7-10); and determining whether the measured service level parameter values satisfy

predetermined service level thresholds (par. 37, lines 7-11). Fuller does not explicitly teach: determining a corrective modification of one at least one resource deployment or configuration based on the measured service level parameter values when the value for the service level parameter for the resource does not satisfy the predetermined service level thresholds in order to satisfy the predetermined service level thresholds. However, Zavalkovsky discloses: "As shown at block 514, one or more flows associated with the particular service level are reassigned to a new service level," (lines 35-37 of column 13). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to determine a corrective modification of one at least one resource deployment or configuration based on the measured service level parameter values when the value for the service level parameter for the resource does not satisfy the predetermined service level thresholds in order to satisfy the predetermined service level thresholds. "Conversely, if the dropped packet threshold has been exceeded, then an interface is overloaded and one or more flows are reassigned to different service levels to relieve the overload condition," (lines 35-37 of column 13 in Zavalkovsky). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to determine a corrective modification of one at least one resource deployment or configuration based on the measured service level parameter values when the value for the service level parameter for the resource does not satisfy the predetermined service level thresholds in order to satisfy the predetermined service level thresholds in the system as taught by Fuller.

b. With respect to claim 2, Fuller discloses that the monitored service level parameter comprises one of a performance parameter and an availability level of at least one system resource (par. 34, lines 1-2).

c. With respect to claim 4, Fuller discloses that the modification of resource deployment comprises at least one of adding additional instances of the resource and modifying a configuration of the resource (par. 61, lines 9-14).

d. With respect to claim 7, Fuller discloses writing to a log information indicating whether the service level parameter values satisfy the predetermined service thresholds (par. 37, line 13).

e. With respect to claim 16, Fuller discloses invoking an operation to implement the determined additional resource allocation (par. 36, lines 21-23).

f. With respect to claim 18, Fuller discloses a system for managing multiple resources in a system including at least one host (par. 30, lines 1-4), network (par. 28, lines 4-12), and a storage space comprised of at least one storage system that each host is capable of accessing over the network (par. 27, line 5), comprising:

means for measuring and monitoring a plurality of service level parameters indicating a state of the resources in the system (par. 36, lines 7-10); means for determining values for the service level parameters (par. 37, lines 5-7);

means for determining whether the service level parameter values satisfy predetermined service level thresholds (par. 37, lines 7-11); means for indicating whether the service level parameter values satisfy the predetermined service thresholds (par. 37, lines 13-22); and means for determining a modification of at least one resource

deployment or configuration if the value for the service level parameter for the resource does not satisfy the predetermined service level thresholds (par. 36, lines 18-23).

g. With respect to claim 20, Fuller discloses that the modification of resource deployment comprises at least one of adding additional instances of the resource and modifying a configuration of the resource (par. 61, lines 9-14).

h. With respect to claim 25, Fuller discloses a system for managing multiple resources in a system including at least one host (par. 30, lines 1-4), network (par. 28, lines 4-12), and a storage space comprised of at least one storage system that each host is capable of accessing over the network (par. 27, line 5), comprising:

a processing unit (par. 27, line 20); a computer readable medium accessible to the processing unit (par. 27, line 21); program code embedded in the computer readable medium executed by the processing unit to perform:

(i) measuring and monitoring a plurality of service level parameters indicating a state of the resources in the system (par. 36, lines 7-10);

(ii) determining values for the service level parameters (par. 37, lines 5-7);

(iii) determining whether the service level parameter values satisfy predetermined service level thresholds (par. 37, lines 7-11);

(iv) indicating whether the service level parameter values satisfy the predetermined service thresholds (par. 37, lines 13-22); and

(v) determining a modification of at least one resource deployment or configuration if the value for the service level parameter for the resource does not satisfy the predetermined service level thresholds (par. 36, lines 18-23).

i. With respect to claim 27, Fuller discloses that the program code for determining the modification of the resource deployment comprises at least one of adding additional instances of the resource and modifying a configuration of the resource (par. 61, lines 9-14).

j. With respect to claim 32, Fuller discloses an article of manufacture including code for managing multiple resources in a system including at least one host (par. 30, lines 1-4), network (par. 28, lines 4-12), and a storage space comprised of at least one storage system that each host is capable of accessing over the network (par. 27, line 5), wherein the code is capable of causing operations comprising:

measuring and monitoring a plurality of service level parameters indicating a state of the resources in the system (par. 36, lines 7-10); determining values for the service level parameters (par. 37, lines 5-7); determining whether the service level parameter values satisfy predetermined service level thresholds (par. 37, lines 7-11); indicating whether the service level parameter values satisfy the predetermined service thresholds (par. 37, lines 13-22); and determining a modification of one at least one resource deployment or configuration if the value for the service level parameter for the resource does not satisfy the predetermined service level thresholds (par. 36, lines 18-23).

k. With respect to claim 33, Fuller discloses that the monitored service level parameter comprises one of a performance parameter and an availability level of at least one system resource (par. 34, lines 1-2).

l. With respect to claim 35, Fuller discloses that modification of resource deployment comprises at least one of adding additional instances of the resource and modifying a configuration of the resource (par. 61, lines 9-14).

m. With respect to claim 38, Fuller discloses writing to a log information indicating whether the service level parameter values satisfy the predetermined service thresholds (par. 37, line 13).

n. With respect to claim 47, Fuller disclose invoking an operation to implement the determined additional resource allocation (par. 36, lines 21-23).

5. Claims 3, 19, 26, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller and Zavalkovsky as applied to claims 2, 18, 25, and 33 above, in view of Mabuchi (U.S. 2002/0069377), Kamada (U.S. 6,381,637), and Ellis (U.S. 5,504,858).

Fuller does not expressly disclose that the service level performance parameters that are monitored are members of a set of performance parameters comprising: a downtime during which the at least one application is unable to access the storage space; a number of times the at least one application host was unable to access the storage space; a throughput in terms of bytes per second transferred between the at least one host and the storage; and an I/O transaction rate. Mabuchi teaches that it is known to monitor the amount of time that a storage device is defective (par. 14, lines 5-6). Kamada teaches that it is known to monitor the number of times a storage space is not able to be accessed (col. 15, lines 61-62). Ellis teaches that it is known to monitor

request rate and data rate (col. 1, lines 37-40). Fuller, Mabuchi, Kamada, and Ellis are all analogous art because they are all from the same field of endeavor of networking systems. At the time of invention, it would have been obvious to use downtime during which the at least one application is unable to access the storage space, the number of times the at least one application host was unable to access the storage space, throughput in terms of bytes per second transferred between the at least one host and the storage, and I/O transaction rate as SLA attributes in Fuller's invention because they are elements of system performance (Fuller par. 36, lines 13-14). Therefore it would have been obvious to combine Fuller with Mabuchi, Kamada, and Ellis for the benefit of monitoring system performance to obtain the inventions as specified in claims 3, 19, 26, and 34.

6. Claims 5, 6, 21, 28, 36, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller and Zavalkovsky in view of Ellis.

a. With respect to claims 5, 21, 28, and 36, Fuller discloses generating a message indicating that the service level parameters do not satisfy the service level attributes (par. 37, lines 17-22). Fuller does not expressly disclose that a time period is associated with one of the monitored service parameters and determining a time during which the value of the service level parameter associated with the time period does not satisfy the predetermined service level threshold. Ellis teaches that it is known to monitor the data rate in a read/write operation and that data rate is the amount of user data that can be transferred per second by the I/O subsystem (col. 1, lines 38-40).

Fuller and Ellis are both analogous art because they are both from the same field of endeavor of storage systems. At the time of invention it would have been obvious to use Ellis' data rate as one of Fuller's service level attributes because data rate is an element of system performance (Fuller par. 36, lines 13-14). Therefore it would have been obvious to combine Fuller with Ellis for the benefit of monitoring system performance to obtain the inventions as specified in claims 5, 21, 28, and 36.

b. With respect to claims 6 and 37, Fuller further discloses that a customer contracts with a service provider to provide the system at agreed upon service level parameters (par. 36, lines 10-13), further comprising:

transmitting a service message to the service provider after determining that the value of the service level parameter does not satisfy the predetermined service level (par. 37, lines 11-13); and transmitting the message indicating failure of the value of the service level parameter for the time period to both the customer (par. 37, lines 17-22) and the service provider (par. 37, lines 11-13).

7. Claims 8, 10, 12, 17, 22, 23, 29, 30, 39, 41, 43, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller and Zavalkovsky in view of Golasky (U.S. 2003/0074599).

a. With respect to claims 8, 22, 29, and 39, Fuller discloses analyzing operating characteristics to determine whether specified thresholds are met (par. 37, lines 7-11), however Fuller does not expressly disclose determining the resource that contributes to the failure of satisfying the threshold, determining whether any additional

instances of the determined at least one resource that contributes to the failure of the service level parameter is available; and allocating at least one additional instance of the determined at least one resource to the system. Golasky teaches to determine that a resource has failed (par. 25, lines 1-3) and that it is possible to locate a replacement resource (par. 25, lines 3-4) and to utilize that resource (par. 25, lines 4-5). Fuller and Golasky are analogous art because they are both from the same field of endeavor of data storage systems. At the time of invention it would have been obvious to one of ordinary skill in the art to modify Fuller to allow it to determine that a resource failure has caused the failure of a SLA requirement and to locate an additional resource and replace the failed resource with the located resource. The motivation for doing so would have been to enable Fuller's invention to be able to meet the customer SLA requirements in the event of a failure (Fuller par. 36, lines 20-21). Therefore it would have been obvious to combine Fuller with Golasky for the benefit of meeting SLA requirements in the event of a failure to obtain the inventions as specified in claims 8, 22, 29, and 39.

b. With respect to claims 10, 23, 30, and 41, Fuller further discloses:

means for determining characteristics of access to the resources by applications operating at the service level; and means for indicating that the service level is not sufficient due to a change in the access characteristics (par. 37, lines 17-22).

c. With respect to claims 12 and 43, Fuller further discloses that the predetermined access characteristics are specified in a service level agreement that indicates the thresholds for the service level parameter values (par. 36, lines 10-15).

d. With respect to claims 17 and 48, Fuller discloses that customers can specify that they want data storage redundancy through a backup system (par. 47, line 3 – par. 48, line 2). Fuller also teaches indicating whether the component failure causes the resource deployment to fall below the predetermined redundancy threshold (par. 37, lines 17-22). Fuller does not expressly disclose detecting a failure of one component and determining whether the component failure causes the resource deployment to fall below the predetermined redundancy of resources. Golasky teaches to determine that a resource has failed (par. 25, lines 1-3). At the time of invention it would have been obvious to one of ordinary skill in the art to modify Fuller to allow it to determine that a backup resource has failed so that the customer can be notified that the backup cannot occur. If Fuller's backup resource can be monitored for failure and a failure is detected, as taught by Golasky, it is obvious that Fuller's customer's request for redundancy cannot be fulfilled as specified. Therefore it would have been obvious to one of ordinary skill in the art to combine Fuller and Golasky for the benefit of indicating that a backup cannot occur to obtain the inventions as specified in claims 17 and 48.

8. Claims 9 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller and Zavalkovsky in view of Golasky as applied to claims 8 and 39 above, and further in view of Ellis.

Fuller and Golasky do not expressly disclose that analyzing the resource deployment comprises performing a bottleneck analysis. Ellis teaches that accessing a storage device can cause a bottleneck (col. 1, lines 59-61). Fuller, Golasky, and Ellis

are analogous art because they are all from the same field of endeavor of storage systems. At the time of invention it would have been obvious to one of ordinary skill in the art to modify Fuller and Golasky to include a bottleneck analysis in the process of determining a failure. The motivation for doing so would have been to find disk failures that are the result of bottleneck conditions. Therefore it would have been obvious to combine Ellis with Fuller and Golasky for the benefit of identifying bottleneck conditions to obtain the inventions as specified in claims 9 and 40.

9. Claims 11 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller and Zavalkovsky in view of Golasky as applied to claims 10 and 41 above, and further in view of Ellis, Napolitano (U.S. 6,301,605), and Yamamoto (U.S. 5,956,750).

Fuller and Golasky do not expressly disclose that the access characteristics include read/write ratio, input/output (I/O) size, and percentage of access being either sequential or random. Ellis discloses that it is known that read/write ratio can be measured (col. 1, lines 40-41). Napolitano discloses that file size can be monitored in I/O transactions (col. 11, lines 58-59). Yamamoto discloses that the ratio between sequential accesses and random accesses to a disk device can be measured (col. 5, lines 58-61). Fuller, Golasky, Ellis, Napolitano, and Yamamoto are all analogous art because they are all from the same field of endeavor of storage systems. At the time of invention, it would have been obvious to use read/write ratio, input/output size, and percentage of access being either sequential or random as SLA attributes in Fuller's

invention because they are elements of system performance (Fuller par. 36, lines 13-14). Therefore it would have been obvious to combine Fuller and Golasky with Ellis, Napolitano, and Yamamoto for the benefit of monitoring system performance to obtain the inventions as specified in claims 11 and 42.

10. Claims 13, 24, 31, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller and Zavalkovsky in view of Toyouchi (U.S. 6,006,251).

Fuller does not expressly disclose that requests from applications using a higher priority service receive higher priority than requests from applications operating at a lower priority service, and that determining the modification of the at least one resource deployment further comprises increasing the priority associated with the service level whose service level parameter values fail to satisfy the predetermined service level thresholds. Toyouchi teaches that requests can be divided into priority groups wherein one group receives higher priority than another. Toyouchi also teaches that requests can change priority due to a relationship with a parameter (col. 11, lines 25-45). Fuller and Toyouchi are analogous art because they are both from the same field of endeavor of networked systems. At the time of invention it would have been obvious to allow Fuller's invention to accommodate storage accesses of different priority levels and that the storage accesses could change priority levels if a level of system performance specified in the SLA was not being reached. The motivation for doing so would have been to ensure that the SLA requirements are met. Therefore it would have been

obvious to combine Fuller with Toyouchi for the benefit of meeting SLA requirements to obtain the invention as specified in claims 13, 24, 31, and 44.

11. Claims 14 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller and Zavalkovsky in view of Toyouchi as applied to claims 13 and 44 above, and further in view of Golasky.

Fuller discloses analyzing operating characteristics to determine whether specified thresholds are met (par. 37, lines 7-11), however Fuller and Toyouchi do not expressly disclose analyzing the resource deployment to determine at least one resource that contributes to the failure of the service level parameter values to satisfy the thresholds; determining whether any additional instances of the determined at least one resource that contributes to the failure of the service level parameter is available; and allocating at least one additional instance of the determined at least one resource to the system. Golasky teaches to determine that a resource has failed (par. 25, lines 1-3) and that it is possible to locate a replacement resource (par. 25, lines 3-4) and to utilize that resource (par. 25, lines 4-5). Fuller, Toyouchi and Golasky are analogous art because they are all from the same field of endeavor of networking systems. At the time of invention it would have been obvious to one of ordinary skill in the art to modify Fuller to allow it to determine that a resource failure has caused the failure of a SLA requirement and to locate an additional resource and replace the failed resource with the located resource. The motivation for doing so would have been to enable Fuller's invention to be able to meet the customer SLA requirements in the event of a failure

(Fuller par. 36, lines 20-21). Therefore it would have been obvious to combine Fuller and Toyouchi with Golasky for the benefit of meeting SLA requirements in the event of a failure to obtain the inventions as specified in claims 14 and 45.

12. Claims 15 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller and Zavalkovsky in view of Yoshimoto (U.S. 2001/0044907).

Fuller discloses determining at least one of host adaptor, network, and storage resources to add to the configuration (par. 61, line 13). Fuller does not expressly disclose that one service level parameter value indicates a time throughput of input/output operations between the at least one host and the storage space has been below a throughput threshold. Yoshimoto teaches to monitor input/output operations of a disk device to determine a time during which the throughput is at a threshold of zero (par. 6, lines 9-11). Fuller and Yoshimoto are analogous art because they are both from the same field of endeavor of storage systems. At the time of invention it would have been obvious to one of ordinary skill in the art to allow Fuller's invention to monitor the time that the throughput in or out of a storage device is at a threshold of zero, as taught by Yoshimoto, in order to enable Fuller's invention to power down a storage device in order to save energy when it is not in use for a period of time (par. 4, lines 12-17). Therefore it would have been obvious to combine Fuller with Yoshimoto for the benefit of energy savings to obtain the inventions as specified in claims 15 and 46.

Response to Arguments

13. Applicant's arguments filed 11 September 2006 have been fully considered but they are not persuasive.

14. (A) Regarding claim 1, the applicant contends that Zavalkovsky does not teach first monitoring a network device and then altering the deployment or configuration of the resource in order to meet the SLA. The examiner respectfully disagrees.

As to point (A), the applicant argues that Zavalkovsky instead discloses monitoring traffic through a network device and then altering the traffic pattern or increasing the size of a buffer in the interface if the SLA is not being met. The examiner first points to lines 32-37 of column 13 in Zavalkovsky which disclose: "Conversely, if the dropped packet threshold has been exceeded, then an interface is overloaded and one or more flows are reassigned to different service levels to relieve the overload condition." The "dropped packet threshold" of Zavalkovsky is the measured SLA variable that must be met. This section mentions redeployment (one or more flows are reassigned to different service levels) and additionally the examiner points to lines 47-49 of column 13 in Zavalkovsky which disclose: "For example, policy servers 206 and 210 may respectively distribute the reassignment information of resource mapping 424 to edge devices 220 and 222." The distribution of reassignment information of resource mapping to edge devices is how Zavalkovsky modifies resource deployment or configuration. Since this modification of resource deployment or configuration is based

on the dropped packet threshold as disclosed above, Zavalkovsky clearly teaches modifying resource deployment or configuration based on SLA values as claimed. Accordingly, the rejection remains proper and is maintained by the examiner.

15. (B) Regarding claims 3, 19, 26, and 34, the applicant contends that Mabuchi, Kamada, and Ellis are not directed to the problem of service level monitoring and automatic reconfiguration of monitored system resources to achieve a contracted service level and therefore cannot teach a corrective modification of resource deployment or configuration based on monitored service level values.

As to point (B), in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The examiner points out that the Zavalkovsky reference (see above arguments and lines 32-45 of column 13 in Zavalkovsky) was relied upon to teach a corrective modification of resource deployment or configuration based on monitored service level values, and not the Mabuchi, Kamada, and Ellis references. These three reference were incorporated each for their specific type of monitoring that they teach and not to teach the modification of resource deployment or configuration base don monitored service levels as argued.

Additionally, the applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

16. (C) Regarding claims 8, 10, 12, 17, 22, 23, 29, 30, 39, 41, 43, and 48, the applicant contends that Golasky does not disclose monitoring service levels. The examiner respectfully disagrees.

As to point (C), the applicant argues that Golasky instead discloses that a failed logical unit is replaced. The examiner points out that Golasky was relied upon for teaching: determining that a resource has failed (paragraph [0025], lines 1-3), that it is possible to locate a replacement resource (paragraph [0025], lines 3-4), and utilizing that resource (paragraph [0025], lines 4-5).

The examiner points out that the Fuller reference was relied upon to teach monitoring service levels (see paragraph [0036] on page 3-4 of Fuller). Fuller ***clearly*** teaches monitoring service levels: "management server 180 monitors components and system events associated with a particular customer based on specific service level agreements indicated by that customer," (lines 7-10 of paragraph [0036] in Fuller). The examiner also points out that the Golasky reference was incorporated in the rejection to obviate determining that a resource has failed, that it is possible to locate a replacement resource, and utilizing that resource (see paragraph [0025] on page 3 of Golasky). Also, see the rejection of claim 8 above for motivation and support.

Again, the applicant attempts to argue the references individually, but one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

17. (D) Regarding claims 9 and 40, the applicant contends that none of the cited references teach an automatic resource deployment using a bottleneck analysis in order to arrive at a modification of monitored resources. The examiner respectfully disagrees.

As to point (D), in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., automatic resource deployment using a bottleneck analysis) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Bottlenecks are avoided, as described in Ellis: "this spreading of data increases performance through load balancing," (lines 58-59 of column 1 in Ellis). Additionally, Ellis discloses: "The RAID system in Ellis additionally stripes data across multiple disks and reduces the contention caused by 'hot' files being located on a single disk," (lines 62-64 of column 1 in Ellis). Zavalkovsky additionally discloses: "At block 502, information is created and stored that defines one or more interfaces that are expected to be overloaded. For example, a system administrator may identify devices or interfaces of the network that are likely to cause " bottlenecks" in forwarding traffic through the network. These

bottlenecks may include such items as a WAN interface or other slow link interfaces that are expected to overload," (lines 58-65 of column 12 in Zavalkovsky). Both Ellis and Zavalkovsky clearly teach performing bottleneck analysis as disclosed in claim 9 of the instant application.

Additionally, the applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections. The applicant must clearly distinguish what they believe is patentable over the prior art of record in their arguments and make clear and concise arguments with supporting evidence instead of general allegations of patentability. The applicant is required to not only disclose what they believe the prior art does not teach, but must also cite and explain why they believe the references do not teach each individual limitation of the claim. Broad, all-encompassing statements are not sufficient as arguments.

Conclusion

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kubala et al. (U.S. 7,051,188 B1) discloses dynamically redistributing sharable resources.

Raja et al. (U.S. 7,058,947 B1) discloses a resource manager and redistributing resources based on priority.

Olson et al. (U.S. 7,069,468 B1) discloses reallocating resources in a storage area network.

Bradley et al. (U.S. 7,082,463 B1) discloses time-based monitoring of SLAs.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Meucci at (571) 272-3892. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell, can be reached at (571) 272-3868. The fax phone number for this Group is 571-273-8300.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [michael.meucci@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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